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Town of St. Francisville/St. Francisville Wastewater Treatment Facility

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Type of Flow Measurement which the facility is currently using:

Totalizer

V. **RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into Bayou Fountain, thence into Bayou Sara in segment 070501 of the Mississippi River Basin. Segment 070501 of the Mississippi River Basin is listed as impaired for pathogen indicators. To date no TMDLs have been completed for this waterbody. However there is a Waste Load Allocation (May 20, 1997) for Bayou Fountain (City of St. Francisville). Limits were set based on this WLA. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Mississippi River Basin, those suspected causes for impairment which are not directly attributed to sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Pathogen Indicators

To protect the receiving waterbody from high levels of pathogenic organisms, fecal coliform limitations have been established in the permit.

The designated uses and degree of support for Segment 070501 of the Mississippi River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 070501	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not	Full	Full	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 070501 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

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VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 070501 of the Mississippi River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish & Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endanger or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

The public notice is published in a local paper of general circulation and the Office of Environmental Services Public Notice Mailing List.

For additional information contact:

Darlene Bernard
Permits Division
Department of Environmental Quality
Office of Environmental Services
PO Box 4313
Baton Rouge, LA 70821-4313

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IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅ May - October	50	20 mg/l	30 mg/l	Limits are set in accordance with the Bayou Fountain (Town of St. Francisville) Wasteload Allocation.
BOD ₅ Nov. - April	75	30 mg/l	45 mg/l	Limits are set in accordance with the Bayou Fountain (Town of St. Francisville) Wasteload Allocation.
TSS May - October Nov. - April	50 75	20 mg/l 30 mg/l	30 mg/l 45 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen May - October	25	10 mg/l	20 mg/l	Limits are set in accordance with the Bayou Fountain (Town of St. Francisville) Wasteload Allocation.
Dissolved Oxygen	---	5 mg/l	N/A	Limits are set in accordance with the Bayou Fountain (Town of St. Francisville) Wasteload Allocation.

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Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No LA0032999:	Issued:	November 22, 2000
	Effective:	December 1, 2000
	Expired:	November 30, 2005

During the period beginning two years from the effective date of the permit and lasting through the expiration date of the permit (Design 0.3 MGD)

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅				
May – October	20 mg/l	30 mg/l	2/month	Grab
BOD ₅				
November-April	30 mg/l	45 mg/l	2/month	Grab
TSS				
May – October	20 mg/l	30 mg/l	2/month	Grab
November – April	30 mg/l	45 mg/l	2/month	Grab

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<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Ammonia-Nitrogen				
May – October	10 mg/l	20 mg/l	2/month	Grab
Dissolved Oxygen	5 mg/l	N/A	2/month	Grab
Fecal Coliform	200	400	2/month	Grab
pH	6-9 Standard Units		2/month	Grab

XI.

ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of EDMS indicates the following inspections were performed for this facility:

Date – February 23, 2005

Findings and/or Violations:

A Routine Compliance Inspection revealed no apparent violations were noted. DMRs, lab reports & Chain of Custody from July 2004 thru January, 2005 was to be faxed to the Department. Documents were not received.

B) Compliance and/or Administrative Orders

A review of EDMS revealed that there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of EDMS revealed DMR's July, 2006 to October, 2006, December, 2006, May, 2007 thru October, 2007. The following violations were noted:

<u>Effluent Characteristic</u>	<u>Number of Violations</u>
CBOD ₅ – (concentration)	
May – October	1
CBOD ₅ – (mass)	
May – October	1
BOD ₅ - (concentration)	
November – April	0
BOD ₅ - (mass)	
November – April	0
TSS - (concentration)	
May – October	1
November – April	0

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<u>Effluent Characteristic</u>	<u>Number of Violations</u>
TSS - (mass)	
May – October	2
November – April	0
Ammonia-Nitrogen (concentration)	
May – October	0
Ammonia-Nitrogen (mass)	
May – October	1
Dissolved Oxygen	0
Fecal Coliform	0
pH	0

XII. ADDITIONAL INFORMATION:

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.3 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ gal/lb} \times 0.3 \text{ MGD} \times 20 \text{ mg/l} = 50 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. Please make additional copies to be utilized for each year of this permit. All other requirements of the Municipal Wastewater

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Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan, Vol. 10, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 1999.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 1999.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of St. Francisville, St. Francisville Wastewater Treatment Facility, May 31, 2005.